

## Abstract

System for testing attenuators by a flatness and standing wave ratio tests which includes a vector network analyzer (VNA) adapted to be coupled to a device under test (DUT) and which provides an input stimulus signal for the DUT and, when certain conditions are satisfied, receives  
5 an output signal from the DUT, and a calibration receiver adapted to be coupled to the DUT via a down-converter. When certain conditions are satisfied, the output signal from the DUT is sent to the calibration receiver (through the down-converter to be possibly modified thereby depending on the testing frequency). A signal generator provides a local oscillator (LO) signal for the down-converter. A control unit is connected to the instruments and embodies software which analyzes  
10 the testing conditions, i.e., the attenuator value being tested, and selects whether the network analyzer or the calibration receiver will measure the output signal from the DUT.